

IN THE CLAIMS

Please replace all prior versions, and listings, of claims in the application with the following list of claims. Additions are indicated by underlining and deletions are indicated by strikeouts and/or double bracketing.

1-32. (Cancelled)

33. (Previously Presented) A method of increasing localized bloodflow in tissue by delivering to skin an L-arginine derivative, the method comprising the step of:

applying topically to the skin a delivery vehicle for the L-arginine derivative, said delivery vehicle comprising an amount of the L-arginine derivative effective to increase localized tissue bloodflow when combined with an agent for creating a hostile biophysical environment comprising an ionic salt mixture comprising choline chloride, sodium chloride, and magnesium chloride, the agent being at a concentration sufficient to create the hostile biophysical environment, the hostile biophysical environment causing the L-arginine derivative to migrate from the delivery vehicle to the skin where the L-arginine derivative is absorbed by tissue in the area surrounding the skin where the L-arginine derivative is applied.

34. (Previously Presented) The method of claim 33 wherein the delivery vehicle is selected from the group consisting of topical creams, topical liquids, topical lotions, and topical ointments, wherein the ionic salt mixture comprises, by weight, sodium chloride (0.25% to 25%), choline chloride (0.25% to 25%), and magnesium chloride (0.25% to 25%).

35. (Previously Presented) The method of claim 33 wherein the delivery vehicle is a hydrophobic delivery vehicle comprising the L-arginine derivative and the ionic salt mixture, the ionic salt mixture comprising, by weight, sodium chloride (0.25% to 25%), choline chloride (0.25% to 25%), and magnesium chloride (0.25% to 25%).

36-37. (Canceled)

38. (Previously Presented) The method of claim 33 wherein the act of applying comprises applying a transdermal patch comprising the L-arginine derivative and a penetrating agent to the skin.

39. (Previously Pending) A method of delivering to skin a nitric oxide releasing substance selected from the group consisting of L-arginine, L-arginine salts, and L-arginine derivatives, the method comprising the step of:

applying topically to the skin a delivery vehicle for the substance, said delivery vehicle comprising the substance and an ionic salt at a concentration sufficient to create a hostile biophysical environment, the hostile biophysical environment causing the substance to migrate from the delivery vehicle to the skin where the substance is absorbed by tissue,

wherein said delivery vehicle comprises, by weight, water (20%-80%), mineral oil (3%-18%), glyceryl stearate (0.5%-12%), squalene (0.2%-12%), cetyl alcohol (0.1%-11%), propylene glycol stearate (0.1%-11%), wheat germ oil (0.1%-6%), glyceryl stearate (0.1%-6%), isopropyl myristate (0.1%-6%), stearyl stearate (0.1%-6%), polysorbate 60 (0.1%-5%), propylene glycol (0.05%-5%), tocopherol acetate (0.05%-5%), collagen (0.05%-5%), sorbitan stearate (0.05%-5%), vitamin A&D (0.02%-4%), triethanolamine (0.01%-4%), methylparaben (0.01%-4%), aloe vera extract (0.01%-4%), imidazolidinyl urea (0.01%-4%), propylparaben (0.01%-4%), bha (0.01%-4%), L-arginine hydrochloride (0.25% to 25%), sodium chloride (0.25% to 25%), and magnesium chloride (0.25% to 25%).

40. (Previously Presented) The method of claim 39 wherein the delivery vehicle further comprises choline chloride (0.25%-25% by weight).

41. (Previously Presented) The method of claim 39 wherein the delivery vehicle further comprises L-arginine glutamate (0.25%-25% by weight).
42. (Previously Presented) A method of treating impotence in a male comprising:
delivering to a penis a substance that is a nitric oxide precursor selected from the group consisting of L-arginine and L-arginine derivatives by topically applying to the penis a delivery vehicle for the substance, said delivery vehicle comprising an amount of the substance effective to increase bloodflow in the penis when combined with an agent for creating a hostile biophysical environment at a concentration sufficient to create the hostile biophysical environment, the hostile biophysical environment causing the substance to migrate from the delivery vehicle to the penis where the substance is absorbed by the penis.
43. (Previously Presented) The method of claim 42 wherein the delivery vehicle is selected from the group consisting of topical creams, topical liquids, topical lotions, and topical ointments, the substance is L-arginine hydrochloride, 0.25% to 25% by weight, the delivery vehicle further comprising an ionic salt mixture comprising choline chloride at 10% by weight, sodium chloride at 10% by weight, and magnesium chloride at 5% by weight.
44. (Previously Presented) The method of claim 42 wherein the delivery vehicle is a hydrophobic delivery vehicle comprising the substance, wherein the substance is L-arginine hydrochloride at 12.5% by weight, and wherein the delivery vehicle further comprises an ionic salt mixture comprising choline chloride at 10% by weight, sodium chloride at 10% by weight and magnesium chloride at 5% by weight.
- 45-46. (Canceled)

47. (Previously Presented) A method of treating impotence in a male by delivering to skin a nitric oxide releasing substance selected from the group consisting of L-arginine, L-arginine salts, and L-arginine derivatives, the method comprising the step of:

applying topically to a penis a delivery vehicle for the substance, said delivery vehicle comprising the substance and an ionic salt at a concentration sufficient to create a hostile biophysical environment, the hostile biophysical environment causing the substance to migrate from the vehicle to the penis where the substance is absorbed by tissue,

wherein said delivery vehicle comprises, by weight, water (20%-80%), mineral oil (3%-18%), glyceryl stearate (0.5%-12%), squalene (0.2%-12%), cetyl alcohol (0.1%-11%), propylene glycol stearate (0.1%-11%), wheat germ oil (0.1%-6%), glyceryl stearate (0.1%-6%), isopropyl myristate (0.1%-6%), stearyl stearate (0.1%-6%), polysorbate 60 (0.1%-5%), propylene glycol (0.05%-5%), tocopherol acetate (0.05%-5%), collagen (0.05%-5%), sorbitan stearate (0.05%-5%), vitamin A&D (0.02%-4%), triethanolamine (0.01%-4%), methylparaben (0.01%-4%), aloe vera extract (0.01%-4%), imidazolidinyl urea (0.01%-4%), propylparaben (0.01%-4%), bha (0.01%-4%), L-arginine hydrochloride (0.25% to 25%), sodium chloride (0.25% to 25%), and magnesium chloride (0.25% to 25%).

48. (Previously Presented) The method of claim 47 wherein the delivery vehicle further comprises choline chloride (0.25%-25% by weight).

49. (Previously Presented) The method of claim 47 wherein the delivery vehicle further comprises L-arginine glutamate (0.25%-25% by weight).

50. (Previously Presented) The method according to any one of claims ~~42-49~~ 42-44 and 47-49 wherein the delivery vehicle is contained in a condom which is placed on the penis.

- 51-55. (Canceled)

56. (Previously Presented) A method of promoting hair growth by delivering, to a selected area of skin where hair growth is desired, a nitric oxide releasing substance selected from the group consisting of L-arginine, L-arginine salts, and L-arginine derivatives, the method comprising:

topically applying, to the selected area of the skin where hair growth is desired, a delivery vehicle for the substance, said delivery vehicle comprising the substance and an ionic salt at a concentration sufficient to create a hostile biophysical environment, the hostile biophysical environment causing the substance to migrate from the delivery vehicle to the selected area of the skin where hair growth is desired, where the substance is absorbed by the selected area of the skin,

wherein said delivery vehicle comprises, by weight water (20%-80%), mineral oil (3%-18%), glyceryl stearate (0.5%-12%), squalene (0.2%-12%), cetyl alcohol (0.1%-11%), propylene glycol stearate (0.1%-11%), wheat germ oil (0.1%-6%), glyceryl stearate (0.1%-6%), isopropyl myristate (0.1%-6%), stearyl stearate (0.1%-6%), polysorbate 60 (0.1%-5%), propylene glycol (0.05%-5%), tocopherol acetate (0.05%-5%), collagen (0.05%-5%), sorbitan stearate (0.05%-5%), vitamin A&D (0.02%-4%), triethanolamine (0.01%-5%), methylparaben (0.01%-4%), aloe vera extract (0.01%-4%), imidazolidinyl urea (0.01%-4%), propylparaben (0.01%-4%), bha (0.01%-4%), L-arginine hydrochloride (0.25% to 25%), sodium chloride (0.25% to 25%), and magnesium chloride (0.25% to 25%).

57. (Previously Presented) The method of claim 56 wherein the delivery vehicle further comprises choline chloride (0.25%-25% by weight).

58. (Previously Presented) The method of claim 56 wherein the delivery vehicle further comprises L-arginine glutamate (0.25%-25% by weight).

- 59-60. (Canceled)

61. (Previously Presented) A method of delivering to skin an L-arginine derivative, the method comprising the step of:
- topically applying to the skin a delivery vehicle for the L-arginine derivative, said delivery vehicle comprising the L-arginine derivative at a concentration of 0.25% to 25% by weight, the L-arginine derivative contained within packaging selected from the group consisting of a liposome, an emulsion of collagen, and a collagen peptide, said packaging being at a concentration within the delivery vehicle sufficient to create an hostile biophysical environment, the hostile biophysical environment causing the packaging to migrate from the delivery vehicle to the skin where the L-arginine derivative is released from the packaging and absorbed by tissue.
62. (Previously Presented) The method of claim 61 wherein the delivery vehicle is applied to the penis.
63. (Previously Presented) The method of claim 61 wherein the delivery vehicle is applied to a selected area of skin where hair growth is desired.
- 64-69. (Canceled)
70. (Previously Presented) The method of increasing localized bloodflow in tissue of claim 33 wherein the effective amount of the substance is 0.25% to 25% by weight of the delivery vehicle.
71. (Cancelled).
72. (Previously Presented) The method of increasing localized bloodflow in tissue of claim 33, wherein the agent for creating a hostile biophysical environment has a concentration of 0.25% to 25% by volume of the delivery vehicle.

73. (Previously Presented) The method of increasing localized bloodflow in tissue of claim 33, wherein the delivery vehicle further comprises an agent selected from the group consisting of a pharmaceutically acceptable acid, a pharmaceutically acceptable base, polylysine, polyglutamine, polyaspartate, and copolymers of charged amino acids.
74. (Previously Presented) The method of treating impotence of claim 42 wherein the effective amount of the substance is 0.25% to 25% by weight of the delivery vehicle.
75. (Previously Presented) The method of treating impotence of claim 42 wherein the agent for creating a hostile biophysical environment is a salt selected from the group consisting of sodium chloride, choline chloride, potassium chloride, lithium chloride, magnesium chloride, and mixtures thereof.
76. (Previously Presented) The method of treating impotence of claim 75 wherein the agent for creating a hostile biophysical environment has a concentration of 0.25% to 25% by volume of the delivery vehicle.
77. (Previously Presented) The method of treating impotence of claim 42 wherein the agent for creating a hostile biophysical environment is selected from the group consisting of a pharmaceutically acceptable acid, a pharmaceutically acceptable base, polylysine, polyglutamine, polyaspartate, and copolymers of charged amino acids.
- 78-81. (Cancelled)